

REMARKS

This amendment is responsive to the Office Action dated January 8, 2007. Claims 1 and 3 - 17 are pending in this application. Claims 4 - 16 have been withdrawn from consideration. Claims 1, 3 and 17 are rejected. Reexamination is respectfully requested in view of the foregoing amendments and following remarks.

These remarks follow the order of the outstanding Office Action beginning at page 2 thereof.

In the Specification

The title has been amended in order to conform more closely to Claim 1, which is the screening method for active ingredients. It is believed that this was the Examiner's intent in the suggested title. However, should the Examiner find this amendment objectionable, it is respectfully requested that the Examiner telephone the undersigned for further amendment and clarification.

A typographical error has been corrected at page 2 of the specification.

Claim Rejections - 35 USC § 112

Claims 1, 3 and 17 have been rejected under 35 USC § 112,

second paragraph.

Claim 1 was objected to because there was no antecedent basis for "said active ingredients" in line 9. Applicant respectfully traverses this rejection on the grounds that the active ingredients are initially recited in claim 1, line 1.

Next, the Examiner has objected to claim 1 on the grounds that the meets and bounds of claim 1 are rendered uncertain by the phrase "drying stimulation." The Examiner has asked what "drying stimulation" means. The Examiner should note that this term is clarified at page 15, lines 27 - 29 of Applicant's specification. Drying means complete removal of the supernatant and holding in a CO<sub>2</sub> incubator. However, the Examiner should note that this is but one example of drying and is not to be construed as limiting Applicant's invention. Applicant has claimed only a drying stimulation and, in accordance with MPEP § 2145 (page 2100-159), arguing limitations which are not claimed are not permitted and drying is not limited by the example. Applicant only cites this portion of the specification as an example of drying.

The Examiner's example of exposing the cells to dry compounds will not result in Applicant's invention. Exposing the cells to drying compounds will merely create a slurry of the drying compound and the supernatant (liquid above a precipitate, see attached dictionary definition) included with the cells. This is similar to mixing a dry powder, such as flour, with water

and obtaining a paste. The paste is not dried.

Next, the Examiner has objected to the claims as being narrative and indefinite and failing to conform to current US practice. Applicant respectfully traverses this rejection on the grounds that the claims recite specific steps for the claimed screening method. The Examiner has not cited any portion of the claim that would support the allegation that the claim is narrative and indefinite. Absent guidance from the Examiner, Applicant respectfully submits that the claims as submitted are in accordance with US practice and are not merely a literal translation from a foreign document. The Examiner asserts that the claims are replete with grammatical and idiomatic errors. It is respectfully submitted that the Examiner identify what is referred to.

Response to Arguments

The undersigned appreciates that the previous rejection has been withdrawn.

Claim Rejections Under 35 USC § 103

Beginning at page 4 and continuing to line 9 of page 6, the Examiner discusses the Mak reference, US Patent 9,190,691. As the Examiner recognizes, at page 6, beginning at line 6 up from the bottom, Mak does not teach a method comprising the steps of assaying SCF. Mak does not mention SCF, or teach anything that

would even suggest SCF. Still further, Mak does not test for any substance that is even related to SCF. SCF is described in Applicant's specification at page 2. Mak simply does not suggest in any way testing for substances that relate to inhibiting production and/or release of stem cell factor (SCF) as in the method claimed. The secondary references similarly do not relate to stem cell factor release at all.

The Examiner recites Denda as teaching a dry environment contributes to exacerbation of cutaneous disorders. However, this reference does not suggest that such drying can be used in a step in a method of screening for active ingredients where the active ingredients exhibit effects of ameliorating pruritus, rough skin, or sensitive skin, or effects of whitening, by inhibiting production and/or release of stem cell factor as claimed. Applicant claims that the stimulation is by drying. None of the reference taken singularly or in combination would suggest anything more than drying may effect the skin. There is no suggestion that drying can be a step in the combination of method steps of claim 1.

The Examiner recognizing that the combination of references do not teach steps of assaying SCF then begins an argument on the bottom of six and continuing through line 4 of page 9, by discussing features of certain of the references. However, the Examiner never explains why one of ordinary skill in the art would find a suggestion or reason to combine the references in

the manner claimed in the references. The Examiner asserts that one would have been motivated and had a reasonable expectation of success to modify Mak because it would be in the purview of one of ordinary skill in the art to measure the amount of stem cell factor. However, the Examiner never explains why the references would suggest stem cell factor or basis for the purview.

At the bottom of page 9, the Examiner, beginning at line 5 up from the bottom states that it would be in the purview in one of ordinary skill in the art of practicing the invention to pick and choose ingredients to inhibit the amount or production or release stem cell factor. This is hindsight use of Applicant's specification and claims. Only Applicant teaches the invention, not the art. Such hindsight is impermissible. Still further, the Examiner asserts that it would be obvious to pick and choose. This is also an impermissible rejection because it only boils down to a rejection which is "it is obvious to try." Obvious to try rejections are not supported by facts that teach or suggest an invention.

The Examiner has totally over looked the fact that the essence of the present invention (stem cell factor) is based upon the discovery that SCF production or its release can be promoted by drying of epidermal keratinocytes, and that as a result, screening for active ingredients which inhibit production and/or release of SCF can be carried out easily. The Examiner has made no reference to anything in the art that would teach or suggest

this at all.

Still further, the Examiner has referred to Applicant's description at page 3, lines 21 to 26; and Applicant's experimental example 1, pages 15 to 16 of Applicant's specification. In the specification at page 3, it is stated that the inventors have discovered that SCF production and/or release can be promoted by stimulation. In Applicant's claim 1, this stimulation is a drying stimulation. The drying is of human epidermal keratinocytes. This result is disclosed as being successful in efficiently screening for active ingredients that can effectively inhibit production and/or release of SCF. Applicant's specification cannot be used against Applicant in this manner.

In Example 1, found at pages 15 and 16, Applicant outlines the use of drying stimulation and its relation to SCF production. The Examiner has shown nothing in the prior art that would link a drying simulation to SCF production in the references when combined. On the other hand, claim 1 clearly provides the necessary connection between the drying stimulation and the SCF production as stated.

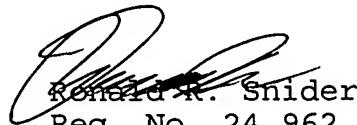
Finally, the combination of references as admitted by the Examiner lacks SCF. SCF is in no reference. This rejection cannot be sustained because lacking all elements, there is no suggestion. The all elements criterion is not present.

Double Patenting

Claim 17 has been canceled.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action in accordance thereof is requested. In the event there is any reason why the application cannot be allowed in this current condition, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems by Interview or Examiner's Amendment.

Respectfully submitted,



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RRS/bam

**superheat (Aero.).** The increase (positive) or decrease of the temperature of the gas in a gas-bag as compared with the temperature of the surrounding air. Similarly, *superpressure*.

**superheated steam (Eng.).** Steam heated at constant pressure out of contact with the water from which it was formed, i.e. at a higher temperature than that of saturation.

**superhet (Telecomm.).** Abbrev. for *SUPersonic HETerodyne*.

**superhet receiver (Telecomm.).** One in which the frequency of the incoming signal is reduced in a mixer or frequency changer, by *heterodyning* with another frequency from the *local oscillator*. The lower frequency output from the mixer, the *intermediate frequency or IF*, is taken through one or more steps of a selective amplifier, before conventional demodulation. There may also be stages of signal-frequency amplification before the mixer, and two stages of frequency conversion and two separate IF amplifiers. Advantages include better gain and selectivity; disadvantages are the extra components and complication, and the possibility of receiving image responses.

**superimpose (Image Tech.).** Adding one image on top of another, so that both are visible.

**superimposed drainage (Geol.).** A river system unrelated to the geological structure of the area, as it was established on a surface since removed. Cf. *consequent drainage*.

**superimposition (Print.).** Coloured blocking foils are frequently used as a base for over-stamping by gold, silver, or other coloured foil. This 'superimposition' is of particular importance to bookbinders and display-card printers.

**superior (Bot.).** An ovary in a flower that is *hypogynous* or *perigynous*.

**superior (Genrl.).** Placed above something else; higher, upper (as the *superior rectus muscle* of the eyeball).

**superior figures, letters (Print.).** Small figures or letters printed above the general level of the line. They are used instead of marks of reference, and in mathematical work etc.; thus:  $x^2$ ,  $e^i$ ,  $10^6$ .

**superior vena cava (Zool.).** See *precaval vein*.

**supernatant liquid (Chem.).** The clear liquid above a precipitate which has just settled out.

**supernormal stimulus (Behav.).** A stimulus that surpasses a natural stimulus in its ability to evoke a response.

**supernova (Astron.).** Novae of absolute magnitude -14 to -16; 3 have been recorded in our own Galaxy, and about 50 more in spiral nebular. The violent outburst results from the gravitational collapse of a massive star, the outer layers being ejected, while the core is left as a neutron star.

**supernumary chromosome (Bot.).** Same as B-chromosome.

**superovulation (Zool.).** Hormone-induced excess ovulation. See *insemination*.

**superoxide anion (Immun.).**  $O_2^-$ . Oxygen molecule that carries an extra unpaired electron, and is therefore a free radical. Generated in neutrophil leucocytes and mononuclear phagocytes when activated, e.g. by ingestion of particles or immune complexes.  $O_2^-$  is highly reactive and toxic. It may be further reduced to  $H_2O_2$  or, when two radicals interact, one is oxidized and one reduced in a dismutation reaction to form  $O_2$  and  $H_2O_2$ . This reaction is catalysed by *superoxide dismutase*, an enzyme present in phagocytic cells. These substances are important in the microbicidal activity of the cells.

**superoxides (Chem.).** Compounds of the alkali and alkaline earth metals containing the  $O_2^-$  group, e.g.  $K^+(O_2^-)$ . Differ from peroxides in yielding oxygen as well as hydrogen peroxide on hydrolysis.

**superphosphate (Chem.).** Superphosphate of lime, an agricultural fertilizer; a mixture of calcium sulphate and dihydrogen calcium phosphate; made by treating bone ash or basic slag (calcium phosphate) with sulphuric acid.

**super plastic forming/diffusion bonding (Aero.).** Method

of manufacturing by joining parts of structures together at high temperature and pressure.

**superposed circuit (Telecomm.).** An additional channel obtained from one or more existing circuits, normally provided for other channels, in such a way that all the channels can be used simultaneously without mutual interference.

**superposition, law of (Geol.).** Strata which overlie other strata are always younger, except in strongly folded areas.

**superposition theorem (Elec.Eng.).** That any voltage/current pattern in a linear network is additive to any other voltage/current pattern.

**superpressure (Aero.).** See under *superheat*.

**super-refraction (Meteor.).** Refraction greater than standard refraction.

**super-regeneration (Telecomm.).** Regeneration, or *feedback*, leading to oscillation which is broken up or *quenched* at a frequency above the upper limit of audibility by a separate oscillator circuit suitably connected to the main amplifying circuit. Amplifiers using this phenomenon can achieve extremely high gain and sensitivity with the minimum of circuit components.

**super-regenerative receiver (Telecomm.).** One with sufficient positive feedback to result in a quenched supersonic oscillation (*squegging*), with consequent increase in sensitivity but also increase in distortion of demodulated signals.

**supersaturation (Chem.).** Solution containing solute in excess of equilibrium. Condensation can take place on nuclei, particularly ions, e.g. those produced by high-speed charged particles, exhibiting a track of minute but visible water drops, as in a *Wilson chamber*.

**supersonic (Phys.).** Faster than the speed of sound in that medium. Erroneously used for ultrasonic. See *Mach number, ultrasonic*.

**supersonic boom (Acous.).** Shock wave produced by an object moving supersonically. At a large distance from the object the time history of the pressure has the shape of an N and is therefore called *N-wave*.

**supersonic speed (Aero.).** Applies to aircraft when its speed exceeds that of local sound. Applies to airflow anywhere when local speed exceeds that of sound.

**supersonic wind tunnel (Aero.).** A wind tunnel in which the stream velocity in the working section exceeds the local speed of sound.

**super stall (Aero.).** This phenomenon appeared with the adoption of high tail planes for swept-wing jet aircraft. When the disturbed airflow from a stalled wing renders the tail controls inoperative, the aircraft will remain in a stable, substantially level attitude, while descending very rapidly. Recovery is by releasing the tail parachute to raise the tail clear of the wing wake so that the elevators again become operative.

**superstitious behaviour in animals (Behav.).** Refers to behaviour that is produced by the joint action of reinforcement and accident; certain acts which happen to coincide with reinforcement will tend to increase; these are often of a bizarre and fixed nature.

**superstructure (Civ.Eng.).** The part of a structure carried upon any main supporting level.

**superstructure (Ships).** A 'decked' structure on the feedback deck extending from side to side of the ship. An integral part of the hull.

**supersulphated cement (Civ.Eng.).** Cement manufactured using a high proportion of granulated blast-furnace slag.

**super-, supra (Genrl.).** Prefix from L. *super*, over, above.

**supersymmetry (Astron., Phys.).** Theory which attempts to link all four fundamental forces, and postulates that each force emerged separately during the expansion of the very early universe.

**supervisor (Comp.).** See *monitor*.

**supervisor program (Comp.).** See *monitor*.

**supervisory control (Elec.Eng.).** A method of remote control of electrical plant from a distant centre in which back-indication of the several control operations is given to the control centre.